

# ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

7/10/03

Title of Invention	SPRAY-FORMED ARTICLES MADE OF PSEUDO-ALLOY AND METHOD FOR MAKING THE SAME
--------------------	---

Application Number :

Confirmation Number:

First Named Applicant: Grigoriy Grinberg

Attorney Docket Number: 201-0423

Art Unit:

Examiner:

Search string: ( 3947607 or 4971838 or 4992337 or 5424101 or 5464486 or 5472487 or 5514422 or 5636124 or 5817267 or 5830586 or 5817267 or 5875830 or 5922412 or 5947179 or 5958520 or 5964395 or 5983495 or 6155330 or 6216765 or 6257309 ).pn

## US Patent Documents

5,663,124  
q. & L.

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
7/10/03	1	3947607	1976-03-30	Gazzard et al.			
	2	4971838	1990-11-20	Hamamura et al.			
	3	4992337	1991-02-12	Kaiser et al.			
	4	5424101	1995-06-13	Atkins			
	5	5464486	1995-11-07	Rao			
	6	5472487	1999-12-05	Chin et al.			
	7	5514422	1996-05-07	Mccune			
	8	5636124	1997-09-02	Rao			
	9	5817267	1998-10-06	Covino et al.			
	10	5830586	1998-11-03	Gray			
	11	5817267	1998-10-06	Covino et al.			
	12	5875830	1999-03-02	Singer et al.			
	13	5922412	1999-07-13	Baughman et al.			
	14	5947179	1999-09-07	Kinane et al.			
	15	5958520	1999-09-28	Cook et al.			
	16	5964395	1999-10-12	Glovatsky			
	17	5983495	1999-11-16	Popoola et al.			
	18	6155330	2000-12-05	Kinane et al.			
✓	19	6216765	2001-04-17	Tseng et al.			
✓	20	6257309	2001-07-10	Kinane et al.			

Signature

g. h. kinane

10/1/06

Examiner Name	Date
9-He xin	10/1/06



SEP 11 2013

PTO/SB/08A (10-96) [MODIFIED]

Approved for use through 10/31/99. OMB 0651-0031

Approved for use through 10-31-85. GPO 80-740-857

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for Form 1449A/PTC

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(use as many sheets as necessary)*

Sheet 1 of 2 Attorney Docket Number FCHM 0133 PUS1 / 201-0423

## U.S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	10/11/06
-----------------------	---	--------------------	----------

**\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.**

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

<sup>3</sup> Standard ST.15. For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 If possible. <sup>5</sup> Applicant is to place a check mark here if English language Translation is attached.



Substitute for Form 1449B/PTO				Complete if Known	
				Application Number	10/604,313
				Filing Date	July 10, 2003
				First Named Inventor	Grigoriy Grinberg et al.
				Group Art Unit	Unknown
				Examiner Name	Unknown
Sheet	2	of	2	Attorney Docket Number	FCHM 0133 PUS1 / 201-0423

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
YRZ		TAFA® (Thermal Spray Equipment and Supplies), Progress Report: SPRAYED METAL FACED PLASTIC TOOLING - ©1988, Pages 1-16, File: 2.5.1, TAFA Incorporated, Concord, N.H., USA	
		TAFA® (Thermal Spray Equipment and Supplies), Technical Data - ARC SPRAYED METAL MOLDS & TOOLING - ©1987, File 2.5.2.1, Issue No. C10818, Pages 1-7 and Figures 1-5, Concord, N.H., USA.	
		TAFA® (Thermal Spray Equipment and Supplies), Technical Data - TAFA TAFALOY® 204ME (EXPERIMENTAL) MOLD MAKING WIRE - ©1992, File 1.9.1.2-204ME, Issue 011206, Pages 1-4, TAFA Incorporated, Concord, N.H., USA.	
		IDAHO NATIONAL ENGINEERING AND ENVIRONMENTAL LABORATORY - "RSP TOOLING" - (2 Pages), BP422KL-0399-1M-T.	
		Sprayform Tools and Dies Limited (STD), Video Transcript, Publication date at least as early as September 1, 2000.	
		"RAPID TOOLING - CHANGING THE FACE OF MANUFACTURING" - Compact Disc Digital Data, dated October 12, 2000., trt: 10:50.	
		TAFA® (Thermal Spray Equipment and Supplies), "ARC SPAY 8830 SYSTEM MANUAL" - Files 1.9.1.1.1 thru 1.9.1.2-205, ©1990-1992. TAFA Incorporated, Concord, N.H., USA.	
		MERLE L. THORPE and JOSEPH W. MINGE, "SPRAY METAL COMPOSITE TOOLING" - 26th National SAMPE Symposium and Exhibition, Volume 26 (Society for the Advancement of Material and Process Engineering), April 28-30, 1981, Pages 374 thru 382, Figures 1-14 and Tables I and II.	
✓		WALTER A. ZANCHUK & LEON J. GRANT, TAFA INCORPORATED, Concord, New Hampshire - "THE USE OF SPRAY METAL TOOLING FOR METAL INJECTION MOLDING" - XP-001120122. Pages 25-34.	

Examiner Signatur	<i>Y. R. Z.</i>	Date Considered	10/1/06
-------------------	-----------------	-----------------	---------

<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup>Unique citation designation number. <sup>3</sup>Applicant is to place a check mark here if English language Translation is attached.



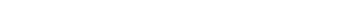
PTO/SB/08B (10-96) [reproduced]

Approved for use through 10/31/95. GPO 0001-0331  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

<p style="text-align: center;"><i>Substitute for Form 1449B/PTO-1449B-1A 10-03-03</i></p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p style="text-align: center;"><i>(use as many sheets as necessary)</i></p>				<i>Complete if Known</i>			
				Application Number		10/604,313	
				Filing Date		July 10, 2003	
				First Named Inventor		Grigoriy Grinberg et al.	
				Group Art Unit		1725	
				Examiner Name		Unknown	
Sheet	1	of	1	Attorney Docket Number	201-0423 (FCHM 0133 PUS1)		

## OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
4182		"Rapid Tooling, Changing the Face of Manufacturing - Compact Disc Digital Data," dated October 12, 2000, TRT: 10:50	

Examiner Signature		Date Considered	10/11/06
-----------------------	---	--------------------	----------

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.